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10/721,389	11/25/2003	Masahiko Hatanaka	MAT-8475US	1655
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RATNERPRESTIA			EXAMINER	
P O BOX 980			DANG, DUY M	
VALLEY FORGE, PA 19482-0980				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,389

Applicant(s)

HATANAKA ET AL.

Examiner

Duy M. Dang

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment filed on July 9, 2008 has been entered and made of record.

Response to Arguments

2. Applicant's arguments filed on July 9, 2008 have been fully considered but they are not persuasive.

(i) It is noted that at the glance, it seems to be that amended features of "a plurality of different sample data sizes" are not disclosed in the applied prior art. However, upon further consideration, the examiner maintains the rejection of claims 1-15 under section 35 U.S.C. 102(e) as set forth in this Office action because of the following interpretation. Specifically, the applied prior art, Bracamonte et al. (USPN 6,668,089, referred as Bracamonte hereinafter) teaches a plurality of different sample data sizes as set forth at figures 1, 2b-2d, 3, and 4a-4d, for example. As shown in figure 1, the data sizes of the compressed data corresponding to the compression rate CR_1 and factor Sf_1 (output of item 11) is different than the data sizes of the compressed data corresponding to the compression rate CR_2 and factor Sf_2 (output of item 15) which is different than the data sizes of the compressed data corresponding to the compression rate CR_i and factor Sf_i (output of 19) and the compression rate is a ratio of the size of the uncompressed image to the size of the compressed image (see col. 1 lines 63-67). Thus, Bracamonte teaches claimed "plurality of different sample data sizes". This interpretation is also consistent with Applicant's disclosed page 6 lines 20-23 of the instant specification. In addition, claimed sample data sizes are not specifically defined, Applicant is reminded that the claims are interpreted in light of the specification, limitations from the specification are not read into the claims and the examiner is not limited to what is not specifically set forth in the claims. See *In re*

Art Unit: 2624

Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) and *In re Tanaka et al.* 193 USPQ (CCPA) 1977.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bracamonte et al. (USPN 6,668,089. Art of record, IDS filed on 9/16/2005, referred as Bracamonte hereinafter).

The advanced statements as set forth in paragraph 2 above are incorporated hereinafter.

Regarding claim 7 as a representative claim, Bracamonte teaches an image data compressing method (see figure 1) comprising:

compressing image data input at first compression rates to produce the first compressed data (see item 11 of figure 1 comprises compression ratios CR_1 and scaling factor SF_1 and this SF_1 also corresponds to claimed “first compression rate” (note that claimed rate is defined as a Q factor according to line 4 of page 6 of the instant specification) because they refer to Q factors, quantization factors);

providing a plurality of sample data sizes and approximate expressions which correspond to said plurality of sample data sizes, respectively (i.e., the representation shown at column 6 lines 1-10 in together with figures 2a-2d and 4a-4d: note that the zones refer to claimed

“plurality of sample data sizes” as well as the compression ratio CR includes claimed “data size” because CR is defined as a ratios of the compressed data size and data size, and these figures illustrate a plurality of CRs so there are a plurality of sample data sized included; and the claimed "approximate expressions" are satisfied by the plurality of slopes m (m_1, m_2, \dots and m_6) or the plurality of straight lines and/or curves illustrated in these figures);

determining a first sample data size from said plurality of sample data sizes which is nearest a data size of the compressed data (see items 40-41 of figure 3 and col. 5 lines 48-58 and discussion above);

selecting a first approximate-expression from said plurality of approximate expressions which corresponds to said first sample data size (see discussion above and col. 5 line 60 to col. 6 line 10: note slopes m (m_1, m_2, \dots and m_6));

changing a compression rate of said first approximate expression (see items 13-14 of figure 1 wherein compression rate (SF_2) is used);

calculating a second sample data size with the changed compressed rate (item 15 of figure 1 refers to a compression scheme that employs a quantization for quantizing data using SF_2 and the data to be quantized refers to claimed “second sample data size”);

determining a second compression rate to be the rate corresponding to the calculated second sample data size within a predetermined threshold range of a target data size (see item 14 which calculates SF_2); and

compressing the image data at the second compression rate (see item 15 of figure 1 which compresses image data using SF_2).

Regarding claim 1, the advanced statements as applied to claim 7 above are incorporated herein. Bracamonte further teaches an image data compressing apparatus (see figure 1) comprising:

an image data compressor for compressing image data input thereto at first and second compression rates to produce first and second compressed data, respectively (see compression ratios CR_1 and CR_2 depicted at 11 and 15 of figure 1 and figure 3);

an approximate expression table including a plurality of sample data sizes and a plurality of approximate expressions which correspond to said plurality of sample data size, respectively (i.e., the representation i.e., table, shown at column 6 lines 1-10 in together with figures 2a-2d and 4a-4d: note that the zones refer to claimed "plurality of sample data sizes" as well as the compression ratio CR includes claimed "data size" because CR is defined as a ratios of the compressed data size and data size, and these figures illustrate a plurality of CRs so there are a plurality of sample data sized included; and the claimed "approximate expressions" are satisfied by the plurality of slopes m (m_1 , m_2 ,... and m_6) or the plurality of straight lines and/or curves illustrated in these figures);

an approximate-expression selector for selecting an approximate expression from said plurality of approximate expressions, said first approximate expression corresponding to a first sample data size nearest a data size of said first compressed data among said plurality of sample data sizes, each of said plurality of approximate expressions indicating a change of a data size in response to a compression rate (see discussion pointed out above and column 5 line 60 to column 7 line 20); and

a compression rate determining unit for determining said second compression rate by (1)changing a compression rate of said selected approximate expression (see col. 6 lines 1-10 and figures 2b, 2c, 2d, and 4a-4d which comprise a plurality of compression rate SF), (2)calculating a second sample data size with the changed of compression rate (see SF2 in see col. 6 lines 1-10 and figures 2b, 2c, 2d, and 4a-4d: note the SF2 corresponds to CR_2/m_2 so second sample data size can be determined from CR_2/m_2) and (3)determining the second compression rate to be the rate corresponding to the second sample data size within a predetermined threshold range of a target data size (see discussion above and item 15 depicted in figure 1).

Regarding claims 2-3 and 8, it is noted these claims further require “polynomial” which is already discussed in the rejection of claims 1 and 7 above.

Regarding claims 4 and 9, Bracamonte further teaches wherein at least one of said plurality of sample data sizes is not greater than a target data size (see figures 2a-2d and 4a-4d. Note CR_1 and CR_2 in figures 2a-2d are not greater than CR_T and CR_1 and CR_V in figures 4a-4d are not greater than CR_T).

Regarding claims 5 and 10, Bracamonte further teaches a memory for storing said input image data (see column 1 lines 15-17); and wherein said image data compressor compresses a portion of said image data stored in said memory at said first compression rate to produce said first compressed data (see item 11 of figure 1 and column 3 lines 1-4. While Bracamonte disclose memory for input image data and partitioning image into blocks, Bracamonte does not explicitly disclose to store a portion of said input image data. However, such storing a portion of

input image data is inherently included in Bracamonte in order for 8x8 pixel blocks of image input data of Bracamonte to be compressed).

Regarding claims 6 and 11, the advanced statements as applied to claims 5 and 10 above are incorporated herein. Bracamonte further teaches a plurality portion of said image data (see 8x8 pixels blocks at column 6 lines 1-4).

Regarding claims 12 and 14, Bracamonte further teaches non-linear approximate expression (see curves represented in figures 4a-4d).

Regarding claims 13 and 15, Bracamonte further teaches exponential polynomial equation (see curves represented in figures 4a-4d) or logarithmic polynomial (see curves represented in figures 4a-4d correspond to non-linear representation which refers to logarithmic polynomial).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd
4/08

/Duy M Dang/
Primary Examiner, Art Unit 2624